

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2004/000044

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) E04B 1/90, B32B13/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(7) E04B1/90, 1/88, 1/74, 1/62, 1/00, E04C2/30, 2/26, 2/288, 2/00, B32B13/12, 13/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Chinese Patent Document, CAJ fulltext database

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN, Y, 2440872 (Peng Qikun, CN), 01.Aug.2001 (01.08.2001), see page 2 line 16-19, claim 1, and figure 1	1-7
Y	CN, Y, 2510558 (Hu Yongzeng, CN), 11.Sept.2002 (11.09.2002), see abstract, page 1 line 30-37, claim 2, and figure 1	1-7
Y	CN, A, 1288991 (Zhang Ming, CN), 28.Mar.2001 (28.03.2001), see claim 5	4

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
23 April 2004 (23.04.04)

Date of mailing of the international search report
03 · JUN 2004 (03 · 06 · 2004)

Name and mailing address of the ISA/
6 Xitucheng Rd., Jimen Bridge, Haidian District,
100088 Beijing, China
Facsimile No. 86-10-62019451

Authorized officer

Telephone No. 86-010-62084765



INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/CN2004/000044

Patent document Cited in search report	Publication date	Patent family members	Publication date
CN2440872Y	01-08-2001	None	
CN2510558Y	11-09-2002	None	
CN1288991A	28-03-2001	None	

A. 主题的分类

IPC(7) E04B1/90, B32B13 / 12

按照国际专利分类表(IPC)或者同时按照国家分类和 IPC 两种分类

B. 检索领域

检索的最低限度文献(标明分类系统和分类号)

IPC(7) E04B1/90, 1/88, 1/74, 1/62, 1/00, E04C2/30, 2/26, 2/288, 2/00, B32B13/12, 13/00

包含在检索领域中的除最低限度文献以外的检索文献

中国专利文献, 中国期刊全文数据库

在国际检索时查阅的电子数据库(数据库的名称, 和使用的检索词(如使用))

WPI, EPODOC, PAJ

C. 相关文件

类 型*	引用文件, 必要时, 指明相关段落	相关的权利要求
Y	CN, Y, 2440872 (彭奇琨, 中国), 2001 年 8 月 1 日 (01.08.2001), 说明书第 2 页第 16—19 行, 权利要求 1, 图 2	1-7
Y	CN, Y, 2510558 (扈永增, 中国), 2002 年 9 月 11 日 (11.09.2002), 摘要, 说明书第 1 页第 30—37 行, 权利要求 2, 图 1	1-7
Y	CN, A, 1288991 (张铭, 中国), 2001 年 3 月 28 日 (28.03.2001), 权利要求 5	4

☐ 其余文件在 C 栏的续页中列出。☐ 见同族专利附件。

* 引用文件的具体类型:

“A” 认为不特别相关的表示了现有技术一般状态的文件

“E” 在国际申请日的当天或之后公布的在先申请或专利

“L” 可能对优先权要求构成怀疑的文件, 为确定另一篇引用文件的公布日而引用的或者因其他特殊理由而引用的文件

“O” 涉及口头公开、使用、展览或其他方式公开的文件

“P” 公布日先于国际申请日但迟于所要求的优先权日的文件

“T” 在申请日或优先权日之后公布, 与申请不相抵触, 但为了理解发明之理论或原理的在后文件

“X” 特别相关的文件, 单独考虑该文件, 认定要求保护的发明不是新颖的或不具有创造性

“Y” 特别相关的文件, 当该文件与另一篇或者多篇该类文件结合并且这种结合对于本领域技术人员为显而易见时, 要求保护的发明不具有创造性

“&” 同族专利的文件

国际检索实际完成的日期

23.04 月 2004 (23.04.04)

国际检索报告邮寄日期

03. 6月 2004 (03.06.2004)

中华人民共和国国家知识产权局(ISA/CN)

中国北京市海淀区蓟门桥西土城路 6 号 100088

传真号: (86-10)62019451

授权官员

华王
印王贵华

电话号码: (86-10)62084765

检索报告中引用的 专利文件	公布日期	同族专利	公布日期
CN-Y-2440872	01-08-2001	无	
CN-Y-2510558	11-09-2002	无	
CN-A-1288991	28-03-2001	无	